Vol. XIX.

NOVEMBER, 1905.

No. 7.

## DESCRIPTIONS OF TWO NEW FORMS OF POLYGYRA.

BY GEO. H. CLAPP.

Polygyra smithii n. sp. Plate III, figs. 1-4.1

Shell imperforate, depressed, thin, horn-color, densely covered with elevated epidermal processes, giving the shell a scaly appearance, the hairs following the weak growth lines; embryonic whorls sculptured with elongate granules; spire low, convex, rounded, sutures well impressed, whorls about  $5\frac{1}{2}$ ; body-whorl obtusely carinated above the periphery in its first third; rounded, swollen and very deeply constricted back of the peristome, sharply descending in front; upper half of the aperture, viewed from the under side, forming a half circle; below the periphery almost straight, so that the whole effect is like a human ear; lip wide, white, concave above and flat below, at the periphery a wide, flat entering tooth, basal lip straight, slightly thickened on the upper margin; parietal wall bearing a large, high, very slightly curved tooth extending from the lip-tooth to the axis, a thin wash of whitish callus connecting the upper and lower ends of the lip.

Gr. diam.  $16\frac{1}{2}$ , lesser 14, alt. 10 mm.

Gr. diam.  $15\frac{1}{2}$ , lesser  $13\frac{1}{2}$ , alt. 9 mm.

Gr. diam. 15, lesser 13, alt.  $8\frac{1}{2}$  mm.

Gr. diam.  $14\frac{1}{2}$ , lesser  $12\frac{1}{2}$ , alt.  $8\frac{1}{4}$  mm.

Gr. diam.  $13\frac{1}{2}$ , lesser  $11\frac{3}{4}$ , alt.  $7\frac{1}{2}$  mm.

The first and last measurements given are the extremes of a considerable series, the average size being about 15 mm.

Near the top of Monte Sano, at an altitude of about 1,600 feet, about 5 miles east of Huntsville, Ala., under large logs, piles of stones, etc.

<sup>&</sup>lt;sup>1</sup> This plate will appear in a future number.

"Almost always it is on the ground or on the lower surface of a stone which rests on the ground. I have never seen the snail crawling abroad, even in wet weather. The shells are invariably covered with a dark deposit, which is removed with some difficulty." (H. H. S.)

Also found, but more rarely, on Smithers Mountain and near Gurley and Princeton.

Animals almost black, very shy in confinement, spending most of their time either half or completely buried in the earth.

This most interesting and strongly-marked species is another of Herbert H. Smith's finds, and I take great pleasure in naming it after him. While bearing a striking resemblance to an overgrown *P. inflecta*, it is readily separated by the character of the hairs and the absence of the basal lip-tooth; it is also close to *P. subpalliata*, but is apparently most closely related to *P. inflecta*.

Monte Sano is an outlier of the Cumberland Plateau, so that this may be considered a species of that most interesting faunal region.

Types No. 5388 of my collection and co-types in the collections of the Academy of Natural Sciences, Bryant Walker and T. H. Aldrich.

Polygyra inflecta approximans n. subsp. Plate III, fig. 6.

Differs from typical inflecta in the closely approximated lip teeth, the space between them measuring only about  $\frac{1}{2}$  mm. in width, while in the typical form it measures 1 mm. and over. The aperture is also wider, in proportion to its length, and less rounded in front; body-whorl narrower at the aperture, not swollen back of the lip. In other characters like the type—whorls about  $4\frac{1}{2}$ .

A considerable proportion of the shells have the umbilicus partly open, and while this can hardly be considered a specific character the proportion is greater than in any lot of *inflecta* I have seen.

Greater diam.  $7\frac{1}{2}$ , lesser  $6\frac{1}{2}$ , alt.  $4\frac{1}{4}$  mm.

Greater diam. 8, lesser 7, alt. 5 mm.

Greater diam.  $8\frac{1}{2}$ , lesser  $7\frac{1}{2}$ , alt.  $4\frac{3}{4}$  mm.

Greater diam.  $8\frac{3}{4}$ , lesser  $7\frac{3}{4}$ , alt. 5 mm.

Marion, Ala., where it practically replaces the typical form as only four dead shells of the latter were found. Collected by Herbert H. Smith in May, 1905. A specimen of *P. inflecta* from Jackson, Ala., is figured for comparison, pl. 3, fig. 5.

Types No. 5389 of my collection and cotypes in the collections of the Academy of Natural Sciences, Bryant Walker and T. H. Aldrich.